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Keynote

Bridging AI and Visual Analytics

Alvitta Ottley

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Abstract

Visualization research has long been dedicated to finding innovative approaches to represent complex data sets and convey insights to analysts. However, the advent of artificial intelligence (AI) introduces a paradigm shift, presenting new opportunities for visual analytics. This talk will examine the role of machine learning (ML) algorithms in expediting visual analysis, revealing data patterns, and fostering the discovery of novel insights. However, as we embrace the potential of AI, we must also confront the challenges and limitations it introduces, such as data bias, interpretability, and user trust. We will discuss these and other ethical considerations that we should consider when developing AI-powered visualizations. Overall, this talk aims to demonstrate the potential of AI and ML research to transform visual analytics and provide insights into how researchers and developers can leverage these techniques to create more impactful and engaging tools.

Short Biography

Alvitta Ottley is an Assistant Professor in the Department of Computer Science & Engineering at Washington University in St. Louis. She also holds a courtesy appointment in the Psychological and Brain Sciences Department. Her research, which has won several best paper and honorable mention awards, uses interdisciplinary approaches to solve problems such as how best to display information for effective decision-making and design human-in-the-loop visual analytics interfaces that are more attuned to people's thinking. Dr. Ottley received an NSF CRII Award in 2018 for using visualization to support medical decision-making and an NSF CAREER Award in 2022 for designing context-aware visual analytics systems. She is also the recipient of a 2022 EuroVis Young Researcher Award. For more information, see <https://www.alvitta.com/>.